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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/753,899

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Bruce M. Russell

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EXAMINER

CHIN, RANDALL E

ART UNIT

PAPER NUMBER

1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/753,899

Applicant(s)

RUSSELL, BRUCE M.

Examiner

Randall Chin

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1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 3,8-22,24-29,34,36,37 and 39-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,23,30-33,35 and 38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 101804; 122304; 070505.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Claims 8-22, 26-29, 36 and 37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 05 March 2007.

2. Applicant's election with traverse of the species of Figs. 1 and 5, claims 1-7, 23-25, 30-35 and 38-41 in the reply filed on 05 March 2007 is acknowledged. The traversal is on the ground(s) that the "alleged Specie I-VII appears to show at least one shaft and cleaning elements mounted to the shaft. Further, it does not appear to a burden to search FIGS. 1, 2, 3, 5, 6, 7, 9." This is not found persuasive because each of species 1-7 is deemed to be patentably distinct from one another. For example, claim 8, as already indicated as such by Applicant, recites that the cleaning elements are arranged as sets of spaced wheels along said shaft, which is not readable on elected Figs. 1 and 5. Moreover, Applicant has not traversed on grounds that the species are not patentably distinct. Lastly, searching all seven species for the instant application, along with claims 1-41, would entail a burden upon the Examiner, contrary to Applicant's assertion.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 3 and 34, indicated by Applicant as readable on elected Figs. 1 and 5, is being withdrawn from consideration since claims 3 and 34 recite a shield being mounted

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to said back side across said open area outwardly beyond said cleaning elements", which is not readable on elected Figs. 1 and 5.

Claim 24, indicated by Applicant as readable on elected Figs. 1 and 5, is being withdrawn from consideration since claim 24 recites "wherein said solid shaft is a cylindrical core and said cleaning elements are spikes extending outwardly from said core", which is not readable on elected Figs. 1 and 5.

Claims 25 and 39, indicated by Applicant as readable on elected Figs. 1 and 5, is being withdrawn from consideration since claims 25 and 39 recite "wherein said cleaning elements are elastomeric pads", which is not readable on elected Figs. 1 and 5.

Claim 40, indicated by Applicant as readable on elected Figs. 1 and 5, is being withdrawn from consideration since claim 40 recites "said shaft is an injection molded core, and said cleaning elements being integral soft spikes", which is not readable on elected Figs. 1 and 5.

Claim 41 is also being withdrawn since it depends on withdrawn claim 40.

Specification

4. The disclosure is objected to because of the following informalities:

On p. 6, line 11, "axels" should read --axes--.

On p. 6, line 12, "axel" should read --axle--.

At the end of the claim set and Abstract, delete "281429".

Appropriate correction is required.

Claim Objections

5. Claims 23 and 32 are objected to because of the following informalities:

Claim 23, line 2, change "is" to --are--.

Claim 32, line 1, change "the head" to --a head--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4, 5, 23, 30-32, 35 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 299 12 009 (hereinafter Schindler '009).

With respect to claim 1, the patent to Schindler '009 discloses in Fig. 1 a toothbrush comprising a handle 1, a head 6 connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft (Fig. 1) rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft extending over a major portion of the length of said head, a plurality of cleaning elements 7 mounted to and extending outwardly from said shaft, and said cleaning elements being disposed at an angle which is non-perpendicular to said shaft (Fig. 1).

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As for claim 2, said head 6 is in the form of an open frame (Figs. 1-3) having a centrally located open area, and said cleaning elements 7 being located at said open area.

As for claim 4, said shaft and said cleaning elements 7 are in the form of a roller (Figs. 1 and 3) having said cleaning elements 7 located continuously (Fig. 1) along the length of said shaft.

As for claim 5, shaft is detachably mounted in bearings (for example, one bearing 10 is shown in Fig. 1) secured to said cleaning surface of said head. If so desired, one can detachably mount the shaft in the bearings secured to said cleaning surface of said head.

As for claim 23, said shaft and said cleaning elements 7 are in the form of a roller (Figs. 1 and 3) having said cleaning elements 7 disposed continuously (Fig. 1) along the length of said roller, and said cleaning elements 7 being bristles.

As for claim 30, said toothbrush is deemed a "manual" toothbrush since a user can still "manually" use it.

As for claim 31, said toothbrush is a power toothbrush (see translated Abstract).

Similar as above, with respect to claim 32, Schindler '009 teaches in Fig. 1 a toothbrush comprising a handle 1, a head 6 connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft (Fig. 1) rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft extending over a major portion of the length of said head, a plurality of cleaning elements 7 mounted to and extending outwardly from said shaft, said head being in the form of an

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open frame (Figs. 1-3) having a central open area, said shaft being mounted longitudinally across said frame with said cleaning elements 7 disposed at said open area, and said cleaning elements and said shaft comprising a roller (Figs. 1 and 3) wherein said cleaning elements extend continuously across a major portion of the length of said shaft.

As for claim 35, said shaft is power driven.

As for claim 38, said cleaning elements are fiber bristles.

8. Claims 1, 2, 4, 5, 23, 30, 32 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by France 1147667 (hereinafter Lustig '667).

With respect to claim 1, the patent to Lustig '667 discloses in Fig. 1 a toothbrush comprising a handle 1, a head 5 connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft 3 (Fig. 1) rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft 3 extending over a major portion of the length of said head 5, a plurality of cleaning elements 2 mounted to and extending outwardly from said shaft, and said cleaning elements 2 being disposed at an angle which is non-perpendicular to said shaft (Figs. 3 and 4).

As for claim 2, said head 5 is in the form of an open frame (Figs. 1 and 2) having a centrally located open area, and said cleaning elements 2 being located at said open area.

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As for claim 4, said shaft 3 and said cleaning elements 2 are in the form of a roller (Figs. 1-4) having said cleaning elements 2 located continuously (Fig. 1) along the length of said shaft.

As for claim 5, shaft 3 is detachably mounted in bearings secured to said cleaning surface of said head. If so desired, one can detachably mount the shaft in the bearings secured to said cleaning surface of said head.

As for claim 23, said shaft 3 and said cleaning elements 2 are in the form of a roller (Figs. 1-4) having said cleaning elements 2 disposed continuously (Fig. 1) along the length of said roller, and said cleaning elements 2 being bristles.

As for claim 30, said toothbrush is a manual toothbrush.

Similar as above, with respect to claim 32, Lustig '667 teaches in Fig. 1 a toothbrush comprising a handle 1, a head 5 connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft 3 rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft 3 extending over a major portion of the length of said head 5, a plurality of cleaning elements 2 mounted to and extending outwardly from said shaft 3, said head 5 being in the form of an open frame (Figs. 1 and 2) having a central open area, said shaft 3 being mounted longitudinally across said frame 5 with said cleaning elements 2 disposed at said open area, and said cleaning elements 2 and said shaft 3 comprising a roller (Figs. 1-4) wherein said cleaning elements 2 extend continuously across a major portion of the length

As for claim 38, said cleaning elements 2 are fiber bristles.

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9. Claims 1, 2, 4-6, 23, 30, 32, 33 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazarus 1,643,217 (hereinafter Lazarus).

The patent to Lazarus teaches a toothbrush in Fig. 1 comprising a handle a, a head b connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft e rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft e extending over a major portion of the length of said head, a plurality of cleaning elements c mounted to and extending outwardly from said shaft, and said cleaning elements being disposed at an angle which is non-perpendicular to said shaft since they are spirally mounted (p. 1, lines 48-56).

As for claim 2, said head b is in the form of an open frame having a centrally located open area, and said cleaning elements c being located at said open area.

As for claim 4, said shaft and said cleaning elements are in the form of a roller (Figs. 1, 3 and 4) having said cleaning elements located continuously (Fig. 1) along the length of said shaft.

As for claim 5, shaft is detachably mounted in bearings secured to said cleaning surface of said head.

As for claim 6, said shaft e is in the form of "a bent wire" spirally wound around itself, and said cleaning elements c being bristles extending through said bent wire.

As for claim 23, said shaft e and said cleaning elements c are in the form of a roller (Figs. 1, 3 and 4) having said cleaning elements disposed continuously along the length of said roller, and said cleaning elements being bristles.

As for claim 30, said toothbrush is a manual toothbrush.

As for claim 32, as already stated, Lazarus teaches in Figs. 1-4 a toothbrush comprising a handle a, a head b connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft e rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft extending over a major portion of the length of said head, a plurality of cleaning elements c mounted to and extending outwardly from said shaft, said head being in the form of an open frame having a central open area, said shaft being mounted longitudinally across said frame with said cleaning elements disposed at said open area, and said cleaning elements and said shaft comprising a roller wherein said cleaning elements extend continuously across a major portion of the length of said shaft.

As for claim 33, said shaft is in the form of "a bent wire", and said cleaning elements c are fiber bristles extending through said wire.

As for claim 38, said cleaning elements c are deemed fiber bristles.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarus in view of Lieux 1,860,894 (hereinafter Lieux).

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The patent to Lazarus discloses all of the recited subject matter as set forth above with the exception of said cleaning elements being arranged along the length of said wire in a non-uniform density. The patent to Lieux discloses an arrangement wherein cleaning elements 17 are arranged along the length of a wire 18 in a non-uniform density. It would have been obvious to one of ordinary skill in the art to have modified Lazarus' cleaning elements such that they arranged along the length of a wire in a non-uniform density as suggested by Lieux for the purpose of varying and improving the cleaning effect on a user's teeth during brushing.

Conclusion

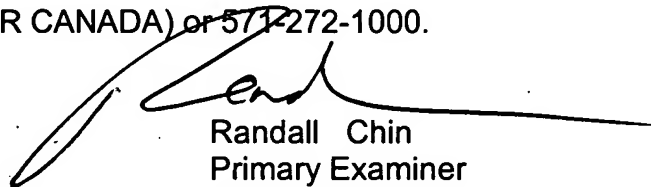
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Flournoy, Merkel, Jr., Gold, Boland, and Inoue are relevant to various twisted wire brush arrangements.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Randall Chin
Primary Examiner
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